

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,645	10/30/2003	Talbot Albert Chubb		7790
7590 12/17/2004			EXAMINER	
Melvin L. Crane			PALABRICA, RICARDO J	
318 South Cleveland Street Arlington, VA 22204-2038			ART UNIT	PAPER NUMBER
			3641	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/696,645	CHUBB, TALBOT ALBERT				
Office Action Summary	Examiner	Art Unit				
	Rick Palabrica	3641				
The MAILING DATE of this communication apporeriod for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	6(a). In no event, however, may a reply be timwithin the statutory minimum of thirty (30) dayill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timety. the mailing date of this communication. D (35 U.S.C. § 133).				
Status	•					
1) Responsive to communication(s) filed on						
2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This						
3) Since this application is in condition for allowan	ce except for formal matters, pro	secution as to the merits is				
closed in accordance with the practice under E.	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the application.						
4a) Of the above claim(s) is/are withdraw	n from consideration.					
5) Claim(s) is/are allowed.		*				
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8)⊠ Claim(s) <u>1-20</u> are subject to restriction and/or e	election requirement.					
Application Papers		/				
9) The specification is objected to by the Examiner	·					
10) The drawing(s) filed on is/are: a) acce	epted or b) objected to by the I	Examiner.				
Applicant may not request that any objection to the o	drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correcti						
11) The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of:	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
1. Certified copies of the priority documents						
2. Certified copies of the priority documents	• •	<del></del>				
3. Copies of the certified copies of the prior		ed in this National Stage				
application from the International Bureau  * See the attached detailed Office action for a list of	•	ad.				
oce the attached detailed office action for a list (	or the definited dopies not rederive	u.				
Attachment(s)						
Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) D Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ite				
B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application (PTO-152)				

Application/Control Number: 10/696,645 Page 2

Art Unit: 3641

## **DETAILED ACTION**

## Election/Restrictions

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

- Process for generating heat by exothermic nuclear reactions using a metal reactor plate interfaced with two solid electrolyte layers (e.g. see Figs. 1 and 2).
- B: Process for generating heat by exothermic nuclear reactions using a metal reactor plate interfaced with one solid electrolyte layer (e.g. see Fig. 4).

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears generic.

- 2. <u>Upon election of one of the embodiments identified above as A and B,</u> Applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears generic.
  - C: Wherein the reactor plate contains at least one diffusion-impending nonmetallic layers (e.g. see claims 1 and 5).
  - D: Wherein the reactor plate contains a dispersion of diffusion-impending non-metallic inclusions (e.g. see claims 9 and 13).

Application/Control Number: 10/696,645 Page 3

Art Unit: 3641

3. <u>Upon election of one of the embodiments identified above as A and B.</u> Applicant is further required under 35 U.S.C. 121 to elect a single species of the metal for the reactor plate, for purposes of examination. This additional requirement is to facilitate examining due to the diverse metals disclosed as suitable plate material (e.g., see claims 3 and 7).

- 4. <u>If embodiment A is elected</u>, Applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears generic.
  - E: Wherein the process flow direction alternates (e.g. see claims 19 and 20, and page 12, 2<sup>nd</sup> paragraph of specification).
  - F: Wherein the process flow direction does not alternate (e.g. see claims 1 and 13, and page 12, 2<sup>nd</sup> paragraph of specification).
- 5. <u>If embodiment B is elected</u>, Applicant is further required under 35 U.S.C. 121 to elect one of the following disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim appears generic.
  - G: Wherein the reactor plate deuterium flows out of the outflow surface of the reactor plate into a deuterium gas reservoir (e.g., see claims 17 and 18).
  - H: Wherein the reactor plate deuterium flows out of the outflow surface into an electrically polarized solid-electrolyte layer (e.g., see claims 5 and 13).

Application/Control Number: 10/696,645

Art Unit: 3641

6. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims

Page 4

readable thereon, including any claims subsequently added. An argument that a claim

is allowable or that all claims are generic is considered nonresponsive unless

accompanied by an election.

elected species. MPEP § 809.02(a).

- 7. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the
- 8. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- 9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 703-306-5756. The examiner can normally be reached on 6:30-5:00, Mon-Thurs..

Application/Control Number: 10/696,645

Art Unit: 3641

14 CONTROL 14 CHIECH: 10/000,0-

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

Page 5

supervisor, Mike Carone can be reached on 703-306-4198. The fax phone number for

the organization where this application or proceeding is assigned is 703-872-9306.

10. Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

RJP

December 14, 2004

Rolabica